

# YEAR IN A GLANCE SUMMARY OF 2003 MILESTONES



## JANUARY, FEBRUARY, MARCH

The City of Carlsbad (City) and The New Mexico Institute of Mining and Technology (New Mexico Tech) and the National Park Service (NPS) signed a Memorandum of Understanding that provides coordination between the three entities to facilitate the development and management of the National Cave and Karst Research Institute.

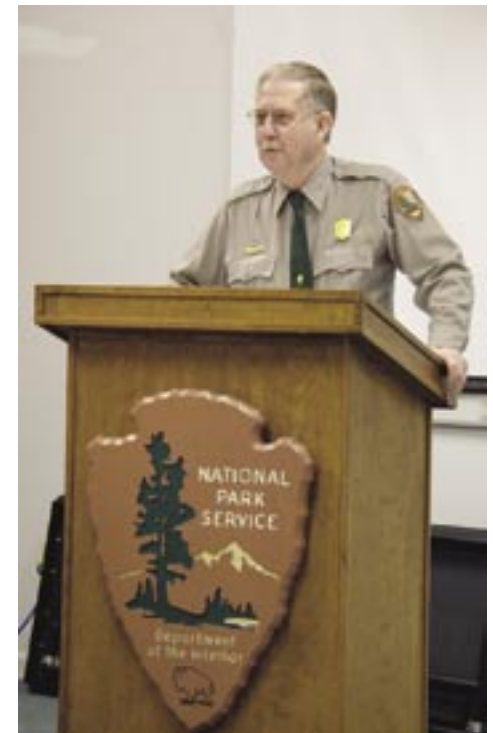
The National Park Service budget signed by the President earmarked \$2 million for the Institute building construction in Carlsbad.

Director Hose met with National Park Service Water Resources Division in reference to the proposed building site for NCKRI.

An additional \$350,000 was appropriated in next year's New Mexico state (FY03-04) budget for the NCKRI building.

The Federal Working Group met for three days at Mammoth Cave National Park, Kentucky, to discuss the Institute's continuing development and heard numerous presentations on cave and karst programs in Kentucky.

**Mammoth Cave National  
Park Superintendent  
Ron Switzer speaks to the  
Federal Working Group.**



## APRIL, MAY, JUNE

The director continued contacting U.S. academic institutes and other groups with cave and karst programs to explore how the Institute might work with them. Individual discussions and correspondences took place with representatives from a score of colleges and universities, the Cave Research Foundation, the National Speleological Society, Edwards Aquifer Authority, Environmental Systems Research Institute, Los Alamos and Sandia National Laboratories, and the New Mexico State Lands Office.

Interim director Zelda Bailey completed the transition of NCKRI management to the permanent director and moved to a challenging new position as Director of the National Institute of Standards and Technology Boulder Laboratories.

Representatives from the City of Carlsbad, NPS, and New Mexico Tech interviewed three potential architectural design and engineering firms. The group decided to recommend that a joint venture team of Studio D Architects (Las Cruces, New Mexico) and Beryl Durham and Associates (Carlsbad, New Mexico) be invited to prepare a bid for work on the Institute's headquarters. This recommendation was accepted by the Carlsbad City Council, which ultimately hired the building designers.

The Department of Geosciences, Mississippi State University initiated a project to develop a digital karst map of Mississippi and digital maps of the karst features and the karst drainage basins that will provide a valuable contribution towards the National Karst Map, which is also sponsored by the Institute.

NPS Geologic Resources Division Chief Dave Shaver, affiliate scientist Penelope Boston, and Director Louise Hose attended the International Conference on Karst Hydrogeology and Ecosystems at Western Kentucky University (WKU) and discussed the Institute and its relationship with WKU, the Karst Waters Institute, Mammoth Cave National Park staff, and other members of the cave/karst community. Institute staff helped organize and host a post-meeting field trip in southeastern New Mexico.



**English speleologist John Gunn and Western Kentucky University researcher Alan Glennon examine karst feature on UIS field trip in June.**



**WKU-NCKRI-USI field trip participants discuss gypsum karst feature near Carlsbad.**





## JULY, AUGUST, SEPTEMBER

The director sent a letter to the superintendents of National Parks with notable cave and karst resources and to 100 representatives of diverse U.S. cave and karst programs (governmental, academic, and non-profit) requesting input and suggestions concerning future Institute operations and administration.



Faculty from New Mexico Tech and four other colleges and universities submitted a grant pre-proposal to the National Science Foundation (NSF) targeted to provide major funding toward the Institute.

The City finalized design issues for The Cascades, the urban redevelopment site where the Institute will be built.

Director Hose, Penny Boston and five scientists/cavers worked extensively this quarter with the Japanese Broadcasting Corporation (NHK) on a high-definition television documentary on active sulfur speleogenesis in Cueva de Villa Luz, Mexico. Field assistance included 16 days by Louise Hose, eight days by Penny Boston, and a total of 30 days by Institute volunteers during September. NHK paid salary and all expenses for the Institute-provided assistance on this project.

During the summer, Institute-affiliated scientists Lewis Land, Penny Boston, and Louise Hose participated in a scientific assessment of Snowy River Passage, a stunning new passage of Fort Stanton Cave, central New Mexico.

New Mexico Tech began the formal search for the Chief Scientist position at NCKRI. This one-year, renewable contract position through a primary NCKRI partner provides additional flexibility during the establishment phase.



## OCTOBER, NOVEMBER, DECEMBER

The Institute held a facilitator-run, two-day meeting with a small, but diverse group of cave/karst program representatives on October 5<sup>th</sup> and 6<sup>th</sup> in Shepherdstown, West Virginia, to discuss the Institute's operational and administrative vision.

Director Hose met with City of Carlsbad representatives and NCKRI building architects for an unveiling of the preliminary building plans for the Institute.

Lewis Land led a field trip for New Mexico Bureau of Geology's 2003 Decision Makers Field Conference *Water Resources of the Lower Pecos Region*. Over 50 individuals attended the conference, including a number of New Mexico state legislators and representatives from several state government agencies and federal legislative offices. The conference focused extensively on water resources in the karstic San Andres aquifer in the Roswell Artesian Basin. Several field stops provided opportunities for discussion of the essential role of karst phenomena in storage and transport of groundwater in the Artesian Aquifer.

The Institute distributed copies of *Recommendations and Guidelines for Managing Caves on Protected Lands*, a joint publication with the Karst Waters Institute, to National Park Service, U.S. Forest Service, Bureau of Land Management, and U.S. Fish and Wildlife Service cave and karst programs for use by their management personnel.

NCKRI and New Mexico Tech's Cave and Karst Program played a major role in the New Mexico Tech President's Report that is submitted annually to the New Mexico State Commission on Higher Education. This report reflects the first full year of the NCKRI-associated Cave and Karst Studies Program at the university. The Hydrology Research Group within which Cave and Karst Studies is housed, was once again ranked fourth in the nation by U.S. News and World Report.

Director Hose attended the Karst Waters Institute's *Interdisciplinary Workshop on Epikarst* where she had the opportunity to discuss NCKRI with dozens of the world's leading cave and karst researchers from Canada, France, Hungary, New Zealand, Slovenia, Ukraine, and across the United States. Hose also attended the National Cave and Karst Management Symposium in Gainesville, Florida, which the Institute co-sponsored. She took advantage of many opportunities to discuss the Institute and potential future partnerships with federal and non-federal cave and karst programs nationwide. Hose and Land attended the Geological Society of America meeting in Seattle, Washington. Members of the NPS Geologic Resources Division also attended and discussed the Institute with interested parties who visited their exhibit booth. The meeting provided an opportunity to discuss the Institute with colleagues from across the United States as well as Australia, Canada, France, and South Korea.